

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A light emitting diode (LED), comprising:
at least one LED chip directly mounted on a base of high heat conductivity;
wherein the LED chip is electrically connected to an applied power supply through a circuit board and the LED chip has a transparent medium layer disposed thereon;
wherein a base top surface acts as a light reflective surface or a light reflective surface is disposed around the base;
wherein the circuit board is disposed on the base;
wherein said base is metal, the base and a screw or screw hole on a bottom surface of the base form an integrated structure, and a screw mechanically connects a heat sink is mechanically and directly connected to the~~to~~ a bottom surface of the metal base via said screw or screw hole.
2. (Canceled).
3. (Original) The LED according to claim 1, further comprising a light reflector at front of the LED chip.
4. (Original) The LED according to claim 1, wherein, the transparent medium is optical glue and a lens.
5. (Original) The LED according to claim 1, wherein, the LED chips are a plurality of LED chips emitting the same color light or different color light, the chips are connected to each other in a serial or/and parallel form.

6. (Canceled).

7. (Previously Presented) The LED according to claim 3, wherein, an angle between the light reflecting surface and an LED axis is an angle from 10° to 70°.

8. (Original) The LED according to claim 4, further comprising light converting material in the optical glue or between the optical glue and the lens.

9. (Previously Presented) An LED lamp including at least one LED, comprising:

a heat sink;

at least one LED mechanically connected to the heat sink through screws or screw holes on or in a base bottom of the LED;

a driving circuit including an electrical connector, to which outgoing leads of the LEDs are connected; and

a transparent bulb housing mounted over the LED;

wherein the LED includes at least one LED chip directly mounted on a base of high heat connectivity;

wherein the LED chip is electrically connected to an applied power supply through a circuit board and the LED chip has a transparent medium layer disposed thereon;

wherein a base top surface is a light reflective surface or a light reflective surface is disposed around the base;

wherein the circuit board is disposed on the base; and

wherein the base is a metal base and a screw mechanically connects the heat sink to a bottom surface of the metal base.

10. (Original) The LED lamp according to claim 9, wherein, the electrical connector is a double-leg bayonet lamp head, multi-leg bayonet lamp head or a screw lamp head.

11. (Original) The LED lamp according to claim 9, wherein, the transparent housing is a transparent, colored or scattering bulb housing made of glass or plastic.

12. (Original) The LED lamp according to claim 9, wherein, a light converting material layer is coated on the inner surface of the bulb housing.

13. (Original) The LED lamp according to claim 9, wherein, the heat sink has heat dispersing flanges on it.

14. (Previously Presented) The LED lamp of claim 13, wherein, the heat sink has a plurality of gyroidal heat dispersing flanges.

15. (Original) The LED lamp according to claim 13, wherein, the inner surface of the heat sink is a light reflection surface.

16. (Original) The LED lamp according to claim 15, wherein, the inner surface is cylindrocannical or parabolic.

17-19. (Canceled).

20. (Previously Presented) The LED according to claim 1, wherein the metal base is made of copper, aluminum, or an aluminum alloy.

21. (Previously Presented) The LED according to claim 1, wherein the screw is integral to the bottom surface of the metal base.

22. (New) A light emitting diode (LED), comprising:
at least one LED chip directly mounted on a base of high heat conductivity;
wherein the LED chip is electrically connected to an applied power supply through a circuit board and the LED chip has a transparent medium layer disposed thereon;

wherein a base top surface acts as a light reflective surface or a light reflective surface is disposed around the base;

wherein said base is metal, the base and a screw or screw hole on a bottom surface of the base form an integrated structure, and a heat sink is mechanically and directly connected to the bottom surface of the metal base via said screw or screw hole; and

wherein the base is disposed between the circuit board and the heat sink.

23. (New) The LED according to claim 1, wherein the circuit board is disposed on an upper surface of the base.